

Status: Active

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Start Date: 3/92

End Date:

Purpose: The objective of this effort is to reduce the number of individual state inspections of highway radioactive materials shipments. This will result in reduced in-transit times, thereby helping to minimize potential exposure hazards to the public. CVSA has developed enhanced inspection procedures which are being tested by the various states through which DOE shipments of radioactive waste are being made. Upon completion of the test phase, the results are expected to indicate how frequently such shipments should be inspected to ensure safety of travel.

Approach: Through the DOE/CVSA cooperative agreement, uniform inspection procedures have been developed. State inspectors will be trained to use the procedures, and a pilot test program on other shipping campaigns will determine the frequency of inspections needed to ensure safety.

History: Draft inspection procedures were developed in 1990. A pilot program to test the procedures was scheduled to be conducted on the WIPP shipments; however, since these shipments were delayed, TEC/WG and CVSA have requested that DOE facilitate data collection by allowing inspection of other shipping campaigns using the enhanced inspection procedures to collect data to test the procedures.

Updates:

(11/94): The TEC Working Group was briefed on the status of the ongoing effort of the CVSA cooperative agreement with DOE. Procedures have been drafted, the data collection process put in place and State inspectors trained to inspect with the new procedures. Due to delays in the WIPP shipments the pilot program to test the procedures has been delayed. However, CVSA is working with the DOE/Spent Fuels program and the DOE/Nuclear Energy Cesium shipments to see if their programs may be used as part of a pilot program. Cesium shipments and the DOE/OCRWM Legal Weight Truck Tests will be used in the CVSA Pilot program.

(as of 7/95): The CVSA pilot study continues with training, inspection and collection of data, using LSA/Nitric Acid shipments, planned radioactive shipments of research fuel and the remaining cesium shipments from Virginia to Washington. Other shipments will be sought to augment the data and provide a more accurate analysis of the enhanced procedures.

The cesium shipping campaign from Colorado to Hanford, Washington is complete and the "After Action Inspection" report is now being prepared. CVSA trained and certified inspectors will inspect roughly 52 shipments of LSA/Nitric Acid as it is moved from Hanford, Washington to various east coast ports. Two shipments of cesium, moving from Lynchburg, Virginia to Hanford, Washington, later this year or early 1996 will be involved in the CVSA pilot study. The enhanced inspection procedures will also be used on shipments of nuclear research fuel moving from Tennessee to South Carolina later this year. It is suggested that Task II-G.7 be incorporated into Task II-G.3 which would be rewritten to encompass both aspects of the CVSA pilot study.

(as of 1/96): Some additional DOE shipments have been identified for use by CVSA in collecting data on the proposed enhanced inspection procedures. This Spring a shipment of aluminum clad research fuel will be transported

from Brookhaven National Labs to Savannah River. The barge shipment consists of five NAC-LWT casks. Each cask will contain 42 elements for a total of 210 elements. When the barge reaches Norfolk, VA the shipment will be trucked the remainder of the distance to Savannah River. No additional training of inspectors is needed along these routes. Also, in the near future some HFIR shipments will move from Oak Ridge National Labs to Savannah River. CVSA will collect data on these shipments in their continuing effort to evaluate the enhanced inspection procedures.

(as of 7/96): 52 LSA/Nitric acid shipments (referred to in the 7/95 update) have been completed; CVSA has prepared and distributed a report. Additional shipments have been identified for inclusion in the pilot program, approved by DOE, and agreed upon by CVSA and respective states. These shipments include: 2 shipments of cesium from Lynchburg, Virginia, to Hanford, Washington, scheduled for August and September 1996; shipments of HFIR from Oak Ridge, Tennessee, to Savannah River, South Carolina, are underway and will consist of approximately one shipment per month for an unknown period of time; one Teledyne Brown shipment using the WIPP TRUPAC from Westwood, New Jersey, to Rocky Flats, Colorado, is scheduled for August 1996; and research fuel shipments from Brookhaven National Laboratory, New York, to Savannah River, South Carolina, are scheduled for November 1996.

Additional inspectors from the Illinois State Police will be trained in September 1996. All other affected states have a sufficient number of CVSA-trained inspectors to handle the necessary inspections.

(as of 1/97): In November 1996 CVSA trained inspectors from 5 states and industry in preparation for WIPP shipments. Inspections of shipments from Oakridge to Savannah River have continued. The CVSA Enhanced Inspection Procedures executive committee will meet in February 1997. If approved by the Executive Committee, the enhanced inspection procedures will be submitted to the full membership for adoption in October.

(as of 7/97): In May 1997, the CVSA Hazardous Material, Training and Executive Committee addressed and passed the following recommendations: the Enhanced North American Standard Uniform Inspection Procedures for Radioactive Shipments and out-of-service criteria, training curriculum (to be reviewed by the Driver and Vehicle Committees prior to the CVSA annual meeting), instructor and inspector training and certification requirements, qualifications and process for applying or removing a RAM decal, and the industry 80 hour awareness and practical exercise training program. These inspection procedures will be applied to the inspection of a commercial motor vehicle transporting radioactive shipments as specified by the DOE. The Committee recommendations will be submitted for approval to the general membership at the CVSA annual meeting in October 1997.

CVSA conducted an extensive survey of CVSA certified RAM state inspectors who had conducted enhanced inspections. Requesting their views on the inspection program, who it should cover, training and other related issues.

CVSA conducted the 10th Enhanced North American Standard training session for 14 South Carolina State Transport Police Inspectors (March 1997), refresher class for 14 certified inspectors and one WIPP mechanic from WA, ID, CO, WY, and NM (May 1997), and 11th training session for 14 state inspectors from MI, NY and IA and 2 WIPP drivers from NM (June 1997).

(as of 1/98): In October 1997, CVSA adopted the Enhanced North American Standard Inspection Procedures and Out-of-Service Criteria for DOE-selected shipments and approved several changes affecting the training, decal use, and inspector and instructor certification for the enhanced course.

CVSA conducted the following Enhanced North American Standard training sessions: 12th training session held in Albuquerque, NM for 16 inspectors from the New Mexico Motor Transportation Division, 13th training session held in Nashville, TN for 17 inspectors from the Tennessee Department of Public Safety, 14th training session held in Las

Vegas, NV for 18 inspectors from the Nevada Highway Patrol, 15th training session held in Reno, NV for 17 inspectors from the Nevada Highway Patrol, 16th training session held in Springfield, IL for 18 inspectors from the Illinois State Police, 17th training session held in Elko, NV for 18 inspectors from the Nevada Highway Patrol.

EM and WIPP formed a joint cooperative agreement with CVSA to provide additional funds for training, outreach, coordination and analysis of procedures.

(as of 7/98): CVSA conducted the following enhanced North American Standard (ENAS) training sessions: 7/18-training session held in Forsyth, Georgia for 12 inspectors from the Georgia Public Service Commission; 7/19-training session held in Tyler, Texas for 10 members of the Texas Department of Public Safety and one inspector from the Ohio Public Service Commission; 7/20-training session held in Springfield, Illinois for 30 inspectors from the Illinois State Police; 7/21-training session held in Denver, Colorado for 20 inspectors from Colorado, Wyoming, New Mexico, and Utah. A refresher ENAS training course was held in Columbus, Ohio for 12 previously trained inspectors from the Ohio Public Utilities Commission; an "Enhanced Refresher" train-the-trainer course was held in Reno, Nevada for 20 representatives from each of the 20 states where CVSA has trained ENAS inspectors. The RAD Inspection News and Training Exercise was distributed according to a quarterly schedule.

(as of 1/99): Draft final report of the pilot project provided to DOE and CVSA for review. Three major actions by CVSA have been requested by DOE in FY99: (1) final report on the pilot issued, (2) white paper exploring steps needed to incorporate enhanced inspection procedure policy and make applicable to all HRCQ shipments, not just DOE shipments; and (3) identify how training and certification program for enhanced inspections can be institutionalized and become self-supporting by September 1999.

(as of 7/99): CVSA Hazmat Committee voted in February 1999 to have the Level VI enhanced RAM inspection apply to all HRCQ shipments, not just DOE shipments. Carriers were surveyed to identify any barriers to this action. None were received from the carriers surveyed. The next step will be to have the full CVSA membership vote on the proposal. Work continues on the training transition. Also, DOE assisted in updating the CVSA training materials by including information and graphics support to portions of the training package.

This task plan can be closed out either in July or after the final pilot program report is issued.

Milestones:

- 3/92 Task proposed
- 1/94 Draft task plan completed
- 1/94 Draft task plan reviewed by TEC Working Group
- 2/93 CVSA Draft Procedures completed
- 2/94 Training Conducted for test program (ongoing).
Data is received from inspections of select DOE shipments, included in the CVSA Pilot Study
Analysis of data (ongoing).
- 5/97 CVSA Hazardous Material, Training and Executive Committee addressed and passed recommendations: to adopt the Enhanced North American Standard Uniform Inspection Procedures for Radioactive Shipments and out-of-service criteria.
- 10/97 During their annual meeting in Denver, CO, CVSA approved the Enhanced North American Standard Inspection Procedures and Out-of-Service Criteria